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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,409	12/19/2001	Susana Fernandez Alonso	033079-003	4867

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EXAMINER

SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,409

Applicant(s)

ALONSO ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-72 is/are pending in the application.
- 4a) Of the above claim(s) 26-39 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-50 is/are allowed.
- 6) ☐ Claim(s) 51-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 51-72 rejected under 35 U.S.C. 103(a) as being unpatentable over Granberg (U. S. Patent Number 6,101,382) in view of Olsson et al. (U. S. Patent Number 5,915,222).

Regarding claim 51, Granberg discloses all the claimed invention as set forth in the instant application, also Granberg discloses a transfer of calling party identification in a mobile communication system, in addition Granberg discloses a method of transmitting a calling subscriber number received at a Gateway Mobile Switching Center ("GMSC") of a home Public Land Mobile Network ("PLMN") along with an incoming call towards a destination subscriber who is a roaming subscriber in a visited PLMN and who is one of a called subscriber and a forwarded-to subscriber by interrogating at least one entity selected from GSM network entities (which reads on column 4 lines 51-63), UMTS network entities, and Inter-Working Functions by at least one interrogating operation selected from GSM MAP operations (which reads on column 4 lines 33-40), UMTS MAP operations, and combinations thereof in order to retrieve a routing number and reach the roaming subscriber and set up the call (which reads on column 2 lines 29-39), the method comprising the steps of extracting, at an interrogating network entity, the received calling subscriber number identification to be further sent in an interrogating

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GSM/UMTS MAP operation (which reads on column 5 lines 17-30), including the extracted calling subscriber number identification in the interrogating GSM/UMTS MAP operation at the interrogating network entity, forwarding the interrogation and the calling subscriber number identification with the interrogating GSM/UMTS MAP operation to the at least one interrogated entity (which reads on column 3 lines 60-67 and column 4 lines 1-5). However Granberg fails to disclose an interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming.

In the same field of endeavor, Olsson et al. discloses Transporting short message service (SMS) messages within a telecommunications network. Olsson et al. further discloses the interrogating non-GSM/UMTS MAP (which reads on non-voice data) operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming (which reads on column 3 lines 25-41).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Sawyer by specifically providing for interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming as taught by Olsson et al. for the purpose of forwarding received short messages to other devices or addresses.

Regarding claim 52, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 51) in addition, Granberg discloses an interrogating GSM/UMTS MAP operation for retrieving the routing number as well as to submit the calling subscriber

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number identification is a MAP operation: "Send Routing information" (which reads on column 6 lines 50-65).

Regarding claim 53, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 51) in addition, Granberg discloses an interrogating GSM/UMTS MAP operation for retrieving a routing number as well as to submit the calling subscriber number identification is a MAP operation: "Provide Roaming Number" (which reads on column 6 lines 50-65).

Regarding claim 54, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 51) in addition, Granberg discloses the home PLMN is one of a GSM network and a UMTS network that include a home GMSC, and the visited PLMN where the home subscriber is roaming is neither a GSM network nor a UMTS network (which reads on column 6 lines 50-65).

Regarding claim 55, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 51) in addition, Granberg discloses the home GMSC interrogates a GSM/UMTS home location register ("HLR") by a MAP operation: "Send Routing information" that includes the calling subscriber number identification, and the GSM/UMTS HLR interrogates an Inter-Working Function used in intersystem roaming by a MAP operation'. "Provide Roaming Number" that also includes the calling subscriber number identification (which reads on column 6 lines 50-65).

Regarding claim 56, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 51) in addition, Granberg discloses the visited PLMN where the home

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subscriber is roaming is one of a GSM network and a UMTS network, and the home PLMN is neither a GSM network nor a UMTS network (which reads on column 5 lines 40-50).

Regarding claim 57, Granberg discloses all the claimed invention as set fourth in the instant application, also Granberg discloses a transfer of calling party identification in a mobile communication system, in addition Granberg discloses a method of transmitting a calling subscriber number received at a Gateway Mobile Switching Center ("GMSC") of a home Public Land Mobile Network ("PLMN") along with an incoming call towards a destination subscriber who is a roaming subscriber in a visited PLMN and who is one of a called subscriber and a forwarded-to subscriber by interrogating at least one entity selected from GSM network entities (which reads on column 4 lines 51-63), UMTS network entities, and Inter-Working Functions by at least one interrogating operation selected from GSM MAP operations (which reads on column 4 lines 33-40), UMTS MAP operations, and combinations thereof in order to retrieve a routing number and reach the roaming subscriber and set up the call (which reads on column 2 lines 29-39), the method comprising the steps of extracting, at an interrogating network entity, the received calling subscriber number identification to be further sent in an interrogating GSM/UMTS MAP operation (which reads on column 5 lines 17-30), including the extracted calling subscriber number identification in the interrogating GSM/UMTS MAP operation at the interrogating network entity, forwarding the interrogation and the calling subscriber number identification with the interrogating GSM/UMTS MAP operation to the at least one interrogated entity (which reads on column 3 lines 60-67 and column 4 lines 1-5). However Granberg fails to disclose an interrogating non-GSM/UMTS MAP operation to be submitted from the IWF

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towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming.

In the same field of endeavor, Olsson et al. discloses Transporting short message service (SMS) messages within a telecommunications network. Olsson et al. further discloses the interrogating non-GSM/UMTS MAP (which reads on non-voice data) operation to be submitted from the IWF towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming (which reads on column 3 lines 25-41).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Sawyer by specifically providing for interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming as taught by Olsson et al. for the purpose of ascertaining the current location of the mobile.

Regarding claim 58, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 57) in addition, Granberg discloses an InterWorking Function used in intersystem roaming interrogates a visited mobile switching center/visitor location register ("MSCNLR") by a MAP operation: "Provide Roaming Number" that includes the calling subscriber number identification (which reads on column 6 lines 50-65).

Regarding claim 59, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 57) in addition, Granberg discloses the home PLMN is one of a GSM network and a UMTS network that include a home GMSC, and the visited PLMN where the

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home subscriber is roaming is also one of a GSM network and a UMTS network (which reads on column 6 lines 50-65).

Regarding claim 60, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 57) in addition, Granberg discloses the home GMSC interrogates a GSM/UMTS home location register ("HLR") by a MAP operation: "Send Routing Information" that includes the calling subscriber number identification, and the GSM/UMTS HLR interrogates the MSC/VLR where the subscriber is roaming by a MAP operation: "Provide Roaming Number" that also includes the calling subscriber number identification (which reads on column 6 lines 50-65).

Regarding claim 61, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 57) in addition, Granberg discloses the calling subscriber number identification is included as a new parameter of a predetermined type in a MAP operation: "Send Routing Information" (which reads on column 6 lines 50-65).

Regarding claim 62, Granberg discloses all the claimed invention as set fourth in the instant application, also Granberg discloses a transfer of calling party identification in a mobile communication system, in addition Granberg discloses a method of transmitting a calling subscriber number received at a Gateway Mobile Switching Center ("GMSC") of a home Public Land Mobile Network ("PLMN") along with an incoming call towards a destination subscriber who is a roaming subscriber in a visited PLMN and who is one of a called subscriber and a forwarded-to subscriber by interrogating at least one entity selected from GSM network entities (which reads on column 4 lines 51-63), UMTS network entities, and Inter-Working Functions by at least one interrogating operation selected from GSM MAP operations (which reads on column

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4 lines 33-40), UMTS MAP operations, and combinations thereof in order to retrieve a routing number and reach the roaming subscriber and set up the call (which reads on column 2 lines 29-39), the method comprising the steps of extracting, at an interrogating network entity, the received calling subscriber number identification to be further sent in an interrogating GSM/UMTS MAP operation (which reads on column 5 lines 17-30), including the extracted calling subscriber number identification in the interrogating GSM/UMTS MAP operation at the interrogating network entity, forwarding the interrogation and the calling subscriber number identification with the interrogating GSM/UMTS MAP operation to the at least one interrogated entity (which reads on column 3 lines 60-67 and column 4 lines 1-5). However Granberg fails to disclose an interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming.

In the same field of endeavor, Olsson et al. discloses Transporting short message service (SMS) messages within a telecommunications network. Olsson et al. further discloses the interrogating non-GSM/UMTS MAP (which reads on non-voice data) operation to be submitted from the IWF towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming (which reads on column 3 lines 25-41).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Sawyer by specifically providing for interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Center ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming as taught by Olsson et al. for the purpose of ascertaining the current location of the mobile.

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Regarding claim 63, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 62) in addition, Granberg discloses the calling subscriber number identification is included in an Extension Container field of a MAP operation: "Send Routing Information".

Regarding claim 64, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 26) in addition, Granberg discloses the calling subscriber number identification is included as a new parameter of a predetermined type in a MAP operation: "Provide Roaming Number".

Regarding claim 65, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 62) in addition, Granberg discloses the calling subscriber number identification is included in an Extension Container field of a MAP operation: "Provide Roaming Number" (which reads on column 6 lines 50-65).

Regarding claim 66, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 62) in addition, Granberg discloses the calling subscriber number identification is included in an Extension Container field of a MAP operation: "Send Routing Information".

Regarding claim 67, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 62) in addition, Granberg discloses any of a GSM and UMTS MSC/VLR store on a per subscriber and per call basis the calling subscriber number identification received in a MAP operation: "Provide Roaming Number" for further delivery to the destination subscriber (which reads on column 6 lines 50-65).

Regarding claim 68, Granberg discloses all the claimed invention as set fourth in the instant application, also Granberg discloses a transfer of calling party identification in a mobile communication system, in addition Granberg discloses a method of transmitting a calling subscriber number received at a Gateway Mobile Switching Center ("GMSC") of a home Public Land Mobile Network ("PLMN") along with an incoming call towards a destination subscriber who is a roaming subscriber in a visited PLMN and who is one of a called subscriber and a forwarded-to subscriber by interrogating at least one entity selected from GSM network entities (which reads on column 4 lines 51-63), UMTS network entities, and Inter-Working Functions by at least one interrogating operation selected from GSM MAP operations (which reads on column 4 lines 33-40), UMTS MAP operations, and combinations thereof in order to retrieve a routing number and reach the roaming subscriber and set up the call (which reads on column 2 lines 29-39), the method comprising the steps of extracting, at an interrogating network entity, the received calling subscriber number identification to be further sent in an interrogating GSM/UMTS MAP operation (which reads on column 5 lines 17-30), including the extracted calling subscriber number identification in the interrogating GSM/UMTS MAP operation at the interrogating network entity, forwarding the interrogation and the calling subscriber number identification with the interrogating GSM/UMTS MAP operation to the at least one interrogated entity (which reads on column 3 lines 60-67 and column 4 lines 1-5). However Granberg fails to disclose an interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming.

In the same field of endeavor, Olsson et al. discloses Transporting short message service (SMS) messages within a telecommunications network. Olsson et al. further discloses the interrogating non-GSM/UMTS MAP (which reads on non-voice data) operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming (which reads on column 3 lines 25-41).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Sawyer by specifically providing for interrogating non-GSM/UMTS MAP operation to be submitted from the IWF towards a visited Mobile Switching Centre ("MSC/VLR") in the visited PLMN where the destination subscriber is roaming as taught by Olsson et al. for the purpose of ascertaining the current location of the mobile.

Regarding claim 69, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 68) in addition, Granberg discloses an interrogating GSM/UMTS MAP operation for retrieving the routing number as well as to submit the calling subscriber number identification is a MAP operation: "Send Routing information" (which reads on column 6 lines 50-65).

Regarding claim 70, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 68) in addition, Granberg discloses an interrogating GSM/UMTS MAP operation for retrieving a routing number as well as to submit the calling subscriber number identification is a MAP operation: "Provide Roaming Number" (which reads on column 6 lines 50-65).

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Regarding claim 71, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 68) in addition, Granberg discloses the home PLMN is one of a GSM network and a UMTS network that include a home GMSC, and the visited PLMN where the home subscriber is roaming is neither a GSM network nor a UMTS network (which reads on column 6 lines 50-65).

Regarding claim 72, Granberg in view of Olsson et al. discloses everything claimed, as applied above (see claims 68) in addition, Granberg discloses the home GMSC interrogates a GSM/UMTS home location register ("HLR") by a MAP operation: "Send Routing information" that includes the calling subscriber number identification, and the GSM/UMTS HLR interrogates an Inter-Working Function used in intersystem roaming by a MAP operation'. "Provide Roaming Number" that also includes the calling subscriber number identification (which reads on column 6 lines 50-65).

Allowable Subject Matter

1. Claims 40-50 are allowed.

Response to Arguments

2. Applicant's arguments with respect to claims 40-72 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Smith 
May 26, 2005


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER